



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/697,731	10/25/2000	Daniel R. Cassiday	SUN1P410/P5326	4544
22434	7590	01/02/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778			CHUNG, PHUNG M	
			ART UNIT	PAPER NUMBER
			2133	
DATE MAILED: 01/02/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/697,731

Applicant(s)

CASSIDAY ET AL.

Examiner

Phung M. Chung

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

Art Unit: 2133

1. Claims 8-15 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 8, lines 8-9, "comparing the first CRC and the received CRC thereby determining whether the encoded message was received with any errors" this is unclear whether the first CRC is the decoded first CRC value or the calculated first CRC value and whether the received CRC value is the decoded received CRC value or the received encoded CRC value. A correction is required.

As per claims 9-15 and 17, these claims are also rejected because they dependent upon the rejected base claim.

Claims 8-15 and 17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

Art Unit: 2133

not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson (6,209,112) in view of .Weaver (5,935,268).

As per claims 1-3, Stevenson discloses the invention substantially as claimed, comprising the steps of:

Calculating a first CRC value for a payload segment of a data packet;

Calculating a second CRC value for a sequence number of the data packet (col. 3, lines 29-31 and 45); and

Combining the first CRC value and the second CRC value thereby creating a third CRC value (updated CRC value). (See col. 3, lines 45-46). Stevenson does not specifically disclose the step of combining the third CRC value with the payload segment of the data packet thereby creating a transmittable data packet. However, it would have been a matter of design choice to a person of ordinary skill in the art, at the time the invention was made, to combine the third CRC value with the payload segment of the data packet thereby creating a transmittable data packet. This is because Stevenson discloses the encoded payload and checksum are then combined with a predetermined format to form the data block (col. 4, lines 25-26) so that the updated data block can be transmitted.

4. Claims 4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson (6,200,112) as applied to claims 1-3 above, and further in view of the admitted prior art.

As per claims 4 and 6, the teaching of Stevenson has been discussed above. Stevenson does not specifically disclose a 30-bit CRC value and the combining of the third CRC value with the payload segment results in a 77-bit data segment. However, the admitted prior art page 2, lines 10-11 disclose such a 30-bit CRC value and the combining of the third CRC value with the payload segment results in a 77-bit data segment. Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teaching of the admitted prior art into the invention of Stevenson for checking the accuracy of the data sent.

As per claim 7, the admitted prior art further discloses inserting a plurality of inversion bits into the transmittable data packet, wherein the plurality of inversion bits maintain DC balance and control run length. (See page 2, line 19 and page 8, lines 5-8).

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson (6,209,112) as applied to claims 1-3 above, and further in view of Sorgi et al (6,493,847).

As per claim 5, the teaching of Stevenson has been discussed above. Stevenson does not specifically disclose that performing an exclusive OR between the first CRC value and the second CRC value. However, Sorgi et al do disclose using an exclusive OR for combining the first and second error detecting value

Art Unit: 2133

to provide an updated detection value. (col. 6, lines 52-54). Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to incorporate the exclusive OR operation of Sorgi et al into the invention of Stevenson to provide an updated data.

6. Applicant's arguments with respect to claims 8-15 and 17 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung M. Chung whose telephone number is 703-305-9686. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

  
PHUNG M. CHUNG  
PRIMARY EXAMINER